1889MNRAS..49..323.

Observations of Comet Barnard (1888, *September* 2) *and Comet Barnard* (1888, *October* 30), *made at the Radcliffe Observatory, Oxford.*

(*Communicated by E. J. Stone, M.A., F.R.S., Radcliffe Observer.*)

The following observations were made with the Barclay equatorial, using the ring-micrometer, with power 100.

Comet Barnard (1888, *September* 2).

Date.	G.M.T.	Local Sidereal Time.	Observer.	✱−★ (Corrected for Refraction only.) R.A.	✱−★ (Corrected for Refraction only.) N.P.D.	No. of Comparisons.	Apparent R.A. of Comet.	Parallax in R.A. / p	Log (p×Δ).	Apparent N.P.D. of Comet.	Parallax in N.P.D. / q	Log (q×Δ).	Reference to Comparison Star.
1888.	h m s	h m s		m s	′ ″		h m s	s		° ′ ″	″		
Nov. 26	8 56 30	1 16 18	F. B.	−0 32·68	+1 35·0	6	2 49 14·51	−0·13	9·1598	95 11 22·4	−6·66	0·8653	(*a*)
26	8 56 39	1 16 27	F. B.	−3 10·50	+1 4·6	7	2 49 13·94	−0·13	9·1598	95 11 15·7	−6·66	0·8653	(*b*)
26	9 7 40	1 27 30	F. B.	−0 35·87	+1 39·4	8	2 49 11·32	−0·12	9·1067	95 11 26·8	−6·67	0·8658	(*a*)
27	9 52 5	2 15 59	W.	−0 36·05	+6 12·2	12	2 42 12·64	−0·04	8·6210	95 26 54·8	−6·67	0·8686	(*c*)
27	10 17 59	2 41 57	W.	−0 42·78	+6 23·7	3	2 42 5·91	0·00	...	95 27 6·3	−6·68	0·8688	(*c*)
27	10 17 59	2 41 57	W.	−2 43·50	+0 13·8	3	2 42 5·82	0·00	...	95 27 8·0	−6·68	0·8688	(*d*)
27	13 24 3	5 48 32	F. B.	+0 46·16	...	7	2 41 12·88	+0·24	9·4274	...	...	...	(*e*)
27	13 24 3	5 48 32	F. B.	−1 37·17	+5 45·7	7	2·41 12·71	+0·24	9·4274	95 28 48·7	−6·53	0·8592	(*f*)
Dec. 22	9 13 2	3 15 23	R.	−0 28·34	−6 14·7	7	0 41 37·67	+0·15	9·3599	97 39	−4·86	0·8701	(*g*)
1889. Feb. 9	6 50 48	4 5 57	R.	+0 47·79	...	5	23 42 28·69	+0·13	9·5259	...	...	...	(*h*)
9	6 53 0	4 8 9	R.	...	−2 17·4	4	...	...	...	94 29 3·9	−2·75	0·8485	(*h*)

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Oakland University on June 4, 2015

1889MNRAS..49..323.

Assumed Places of Comparison Stars.

Comp. Star.	Mean R.A. 1888·0.	Reduction to Apparent R.A.	Mean N.P.D. 1888·0.	Reduction to Apparent N.P.D.	Authority.
	h m s	s	° ′ ″	″	
(*a*)	2 49 44·27	+2·92	95 9 55·8	−8·4	W. B. II. 838.
(*b*)	2 52 21·52	+2·92	95 10 19·3	−8·3	W. B. II. 887.
(*c*)	2 42 45·80	+2·89	95 20 51·1	−8·5	Pola Meridian Obs. *Ast. Nach.* No. 2819.
(*d*)	2 44 46·42	+2·90	95 27 2·6	−8·4	Mean of Karlsruhe (1885) and Radcliffe (1883).
(*e*)	2 40 23·83	+2·89	95 25 43·7	−8·6	Mean of Karlsruhe (1885) and Radcliffe (1886).
(*f*)	2 42 46·98	+2·90	95 23 11·5	−8·5	Mean of W. B. II. 708 and Schjellerup 785.
(*g*)	0 42 3·82	+2·19	97 46	−9·3	Schön. Z.−7°, No. 124.
	Mean R.A. 1889·0.		Mean N.P.D. 1889·0.		
(*h*)	23 41 41·54	−1·64	94 31 10·4	+10·9	Mean of Schön. Z.−4°, 5955 and 1 equatorial comparison with W. B. XXIII. 1041.

Observers' Remarks.

1888, Nov. 26.—Nucleus 10–9 mag.

Nov. 27, 13^h.—Nucleus fainter than on Nov. 26, being now about 10½ mag.

Nov. 27.—Distinct planetary nucleus about 10 mag.

Dec. 22.—Nucleus mag. 10.

1889, Feb. 9.—Comet very faint, only just discernible. Like a small circular nebula with central condensation. Comet low.

In the computations of the parallax the adopted value of the Sun's mean horizontal parallax is 8″·85, and the geocentric distances, Δ, have been taken from the *Astronomische Nachrichten*, Nos. 2867 and 2868.

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Oakland University on June 4, 2015

1889MNRAS..49..323.

Observations of Comet Barnard (1888, *September* 2) **with the Transit-circle.**

1888.	G.M.T. of Transit. h m s	Observer.	Apparent R.A. of Comet. h m s	Apparent N.P.D. of Comet. ° ′ ″	Parallax N.P.D. / q ″	Log ($q \times \Delta$).	Observer's Remarks.
Nov. 16	12 16 39	F. B.	3 57 34·18	92 9 20·8	−6·43	0·8515	Faint; difficult observation.
20	11 33 35	F. B.	3 30 9·59	93 28 39·1	−6·62	0·8587	Nucleus 10–11. Difficult but satisfactory observation.
22	11 11 51	F. B.	3 16 15·32	94 5 39·8	−6·71	0·8620	Thin clouds passing. Difficult.
27	10 18 8	F. B.	2 42 5·62	95 27 8·2	−6·67	0·8688	Not a satisfactory observation; comet very faint.

In the computation of the parallax the adopted value of the Sun's mean horizontal parallax is 8″·85, and the geocentric distances, Δ, have been taken from the *Astronomische Nachrichten*, Nos. 2861 and 2867.

Comet Barnard (1888, *October* 30).

The following observations were made with the Barclay equatorial, using the ring-micrometer, with power 100.

Date.	G.M.T.	Local Sidereal Time.	Observer.	✓−★ (Corrected for Refraction only.) R.A. m s	✓−★ (Corrected for Refraction only.) N.P.D. ′ ″	No. of Comparisons.	Apparent R.A. of Comet. h m s	Parallax in R.A. / p s	Log ($p \times \Delta$).	Apparent N.P.D. of Comet. ° ′ ″	Parallax in N.P.D. / q ″	Log ($q \times \Delta$).	Reference to Comparison Star.
1888.	h m s	h m s											
Nov. 27	15 11 14	7 36 0	F. B.	−1 11·76	...	8	10 16 58·38	−0·15	9·3792	99 51	−4·70	0·8761	(*a*)
27	15 11 14	7 36 0	F. B.	−1 43·92	+1 0·7	8	10 16 57·42	−0·15	9·3792	99 51	−4·70	0·8761	(*b*)
1889.													
Jan. 29	11 28 6	8 0 39	F. B.	+1 46·08	+7 3·7	9	10 5 49·91	−0·14	9·3013	71 22 38·2	−3·52	0·7029	(*c*)
29	12 10 52	8 43 32	F. B.	−1 17·69	+4 55·6	9	10 5 47·79	−0·09	9·1312	71 21 44·9	−3·42	0·6905	(*d*)
Feb. 1	12 39 23	9 23 57	W.	+0 53·49	+4 39·1	9	10 2 27·93	−0·05	8·8127	69 44 3·6	−3·17	0·6634	(*e*)

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

Downloaded from http://mnras.oxfordjournals.org/ at Oakland University on June 4, 2015